In the Claims

1 (currently amended). A peptidomimetic having the structure shown in formula I:

wherein

R¹ is selected from the group consisting of alkyl, alkoxy, cycloalkyl, cycloalkoxy, aryl, aryloxy, alkylcarbonyl, alkoxycarbonyl, cycloalkylcarbonyl, heteroalkyl, heterocycloalkylcarbonyl, heteroarylcarbonyl, aryloxycarbonyl, heteroaryloxycarbonyl, heterocycloalkoxy, or heterocycloalkoxycarbonyl, any of which can be optionally substituted with one or more of the following: any halogen, -CN, -COOH, =O, -OH, -NO₂, -NH₂, -N-alkyl, alkyl, alkoxy, cycloalkyl, cycloalkoxy, aryl, aryloxy, alkylcarbonyl, alkoxycarbonyl, cycloalkylcarbonyl, heteroarylcarbonyl, heteroarylcarbonyl, heteroarylcarbonyl, heteroarylcarbonyl, heteroarylcarbonyl, heterocycloalkoxy, and heterocycloalkoxycarbonyl;

or a salt thereof.

- 2 (previously presented). The peptidomimetic according to claim 1, wherein R¹ is aryl optionally substituted with one or more halogen, -CN, -NO₂, -NH₂, -CH₃, or -OCH₃.
- 3 (previously presented). The peptidomimetic according to claim 2, wherein said one or more halogen is, independently, Cl or F.
- 4 (currently amended). The peptidomimetic according to claim [[1]] 2, wherein [[R¹]] said aryl is phenyl optionally substituted with one or more halogen, -CN, -NO₂, -NH₂, -CH₃, or -OCH₃.
- 5 (previously presented). The peptidomimetic according to claim 4, wherein said one or more halogen is, independently, Cl or F.
- 6 (previously presented). The peptidomimetic according to claim 1, wherein R¹ is heteroaryl optionally substituted with one or more halogen, -CN, -NO₂, -NH₂, -CH₃, or -OCH₃.
- 7 (previously presented). The peptidomimetic according to claim 6, wherein said one or more halogen is, independently, Cl or F.

8 (previously presented). The peptidomimetic according to claim 1, selected from the group consisting of:

$$H_3C$$
 H
 CH_3
 CH_2
 $HO-P=O$
 OH

NC
$$H_3C$$
 H CH_3 CH_2 H $COOH$ $HO-P=O$ OH

$$\begin{array}{c|c}
 & H_3C & H & CH_3 \\
 & O & CH_2 \\
 & M & COOH \\
 & O & CH_2 \\
 & M & COOH \\
 & O & CH_2 \\$$

$$H_2N$$
 O
 CH_2
 H_3C
 CH_2
 $COOH$
 CH_2
 $COOH$
 CH_2
 $COOH$
 CH_2
 $COOH$

$$\begin{array}{c|c} & H_3C & H & CH_3 \\ \hline & O & CH_2 \\ \hline & N & COOH \\ \hline & O & CH_2 \\ \hline & O &$$

$$\begin{array}{c|c} & H_3C & H & CH_3 \\ \hline & O & CH_2 \\ \hline & N & COOH \\ \hline & O & CH_2 \\ \hline & O &$$

or

 $\quad \text{and} \quad$

$$H_3C$$
 CH_2
 H_3C
 CH_2
 CH_2
 $COOH$
 CH_2
 $COOH$
 CH_2
 $COOH$
 $COOH$
 $COOH$

9 (previously presented). A composition comprising a peptidomimetic of claim 1 in a pharmaceutically acceptable carrier or diluent.

10 (previously presented). A method for inhibiting growth or replication, or inducing apoptosis in a target cell, said method comprising contacting the target cell with a peptidomimetic of claim 1 or a composition of claim 9.

11 (previously presented). The method according to claim 10, wherein said peptidomimetic is selected from the group consisting of:

NC
$$H_3C$$
 H_4 CH_3 CH_2 H_4 $COOH$ H_5 H_6 H_7 H_8 H_8

$$H_3C$$
 H
 CH_3
 OCH_3
 OCH_2
 H
 $COOH$
 OCH_3
 OCH_2
 OCH_2
 OCH_3
 OCH_2
 OCH_2
 OCH_3
 OCH_3
 OCH_2
 OCH_3
 OCH_3
 OCH_2
 OCH_3
 OCH_3
 OCH_3
 OCH_2
 OCH_3
 OCH_3

$$\begin{array}{c|c}
 & H_3C & H & CH_3 \\
 & C & CH_2 & \\
 & N & COOH \\
 & N & COOH \\
 & O & CH_2 & \\
 & N & COOH \\
 & O & CH_2 & \\
 & N & COOH \\
 & O & CH_2 & \\
 & O & C$$

$$H_3C$$
 H
 CH_3
 CH_2
 H
 $COOH$
 CH_2
 $HO-P=O$
 OH

and

$$H_3C$$
 C
 CH_2
 CH_2
 CH_2
 CH_2
 $COOH$
 CH_2
 $COOH$
 CH_2
 $COOH$
 CH_2
 $COOH$
 CH_2
 $COOH$
 CH_2
 $COOH$

12 (previously presented). A method for treating a tumor or an oncological disorder in a human or animal, said method comprising administering an effective amount of a peptidomimetic of claim 1 or a composition of claim 9 to the human or animal.

13 (previously presented). The method according to claim 12, wherein said peptidomimetic is selected from the group consisting of:

$$H_3C$$
 H
 CH_3
 CH_2
 H_2N
 N
 $COOH$
 $HO-P=O$
 OH

$$H_3C$$
 H
 CH_3
 CH_2
 H
 $COOH$
 CH_2
 $HO-P=O$
 OH

or

NC
$$H_3C$$
 H CH_3 CH_2 H $COOH$ $HO-P=O$ OH

$$H_3C$$
 H
 CH_2
 N
 $COOH$
 CH_2
 N
 $HO-P=O$
 OH

CI
$$H_3C$$
 H_4 CH_3 CH_2 H_5CH_2 H_7 $COOH$ H_7 H_7 H_7 H_8 H_8

$$H_3C$$
 H
 CH_2
 CH_2
 $COOH$
 CH_2
 $HO-P=O$
 OH

$$H_3C$$
 H
 CH_3
 CH_2
 H
 $COOH$
 CH_2
 $HO-P=O$
 OH

and

14 (previously presented). The method according to claim 12, wherein said tumor or oncological disorder is selected from the group consisting of breast, kidney, mouth, larynx, esophagus, stomach, testis, cervix, head, neck, colon, ovary, lung, bladder, skin, muscle, pancreas, prostate, bone, eye, blood cells, and brain.

15 (currently amended). A peptidomimetic having the formula:

wherein

R¹ is selected from the group consisting of alkyl, alkoxy, cycloalkyl, cycloalkoxy, aryl, aryloxy, alkylcarbonyl, alkoxycarbonyl, cycloalkylcarbonyl, heteroalkyl, heterocycloalkylcarbonyl, heteroaryl, arylcarbonyl, heteroarylcarbonyl, aryloxycarbonyl, heteroaryloxycarbonyl, heterocycloalkoxy, or heterocycloalkoxycarbonyl, any of which can be optionally substituted with

one or more of the following: any halogen, -CN, -COOH, =O, -OH, -NO₂, -NH₂, -N-alkyl, alkyl, alkoxy, cycloalkyl, cycloalkoxy, aryl, aryloxy, alkylcarbonyl, alkoxycarbonyl, cycloalkylcarbonyl, heteroaryl, aryloxycarbonyl, heteroarylcarbonyl, heteroarylcarbonyl, heteroaryloxycarbonyl, heterocycloalkoxy, and heterocycloalkoxycarbonyl;

Y* is phosphotyrosine, wherein the aromatic ring of phosphotyrosine can be optionally substituted with any halogen, -OH, -NO₂, -NH₂, -COOH, alkyl, or alkoxy;

L is leucine, or another non-polar amino acid; or a salt thereof.

16 (previously presented). The peptidomimetic according to claim 15, wherein L is alanine or valine.

17 (previously presented). The peptidomimetic according to claim 1, wherein the peptidomimetic has the structure:

18-19 (canceled).

20 (previously presented). The peptidomimetic according to claim 15, wherein said phosphotyrosine is optionally substituted with –CH₃ or –OCH₃.

21 (new). The peptidomimetic according to claim 1, wherein R¹ is aryl optionally substituted with one or more halogen, -CN, -COOH, =O, -OH, -NO₂, -NH₂, -N-alkyl, alkyl, alkoxy, cycloalkyl, cycloalkoxy, aryl, aryloxy, alkylcarbonyl, alkoxycarbonyl, cycloalkylcarbonyl, heterocycloalkyl, heterocycloalkylcarbonyl, heteroarylcarbonyl, aryloxycarbonyl, heterocycloalkoxy, or heterocycloalkoxycarbonyl.

22 (new). The peptidomimetic according to claim 21, wherein said aryl is phenyl.

23 (new). The peptidomimetic according to claim 21, wherein said aryl is naphthyl or biphenyl.

24 (new). The peptidomimetic according to claim 1, wherein R¹ is heteroaryl optionally substituted with one or more halogen, -CN, -COOH, =O, -OH, -NO₂, -NH₂, -N-alkyl, alkyl, alkoxy, cycloalkyl, cycloalkoxy, aryl, aryloxy, alkylcarbonyl, alkoxycarbonyl, cycloalkylcarbonyl, heteroarylcarbonyl, heteroarylcarbonyl, heteroarylcarbonyl, heteroarylcarbonyl, heterocycloalkoxy, or heterocycloalkoxycarbonyl.

25 (new). The peptidomimetic according to claim 24, wherein said heteroaryl is pyridyl, pyrimidyl, quinolinyl, or isoquinolinyl.